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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/664,824

09/17/2003

Stephen Palm

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12/08/2008

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EXAMINER

NGO, NGUYEN HOANG

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

12/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/664,824	Applicant(s) PALM, STEPHEN	
	Examiner NGUYEN NGO	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This communication is in response to the election of 9/26/2008. Amendments made to the claims have been entered. Accordingly, Claims 1-7 are currently pending in the application.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 4, 6, 7, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Regarding claim 2, it is unclear to what is meant by the first signals comprise even numbered carriers eight through thirty less, carriers twelve and fourteen. Similar rationale is applied to claims 4, 6, and 7. Applicant is urged to clarify such matters.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, and 5, are rejected under 35 U.S.C. 103(a) as being unpatentable over Long (US 2003/0189952), in view of Helms (US 6678316), hereinafter referred to as Long and Helms.

Regarding claims 1, Long discloses a method for Digital Subscriber Line (DSL) handshaking, the method comprises:

Transmitting, by a remote DSL transceiver [0078], first signals containing even numbered carriers for a predetermined period of time to initiate the DSL handshaking to produce R-ETONES-REQ ([0079] Note: synchronize G.hs handshaking), wherein the first signals include periodic phase reversal ([0005] and [0077]);

Detecting, by a central office DSL transceiver ([0081] Note: HSTU-R), the R-ETONES-REQ to produce detected R-ETONES-REQ [0081];

Determining, by the central office DSL transceiver, alignment of a hyper frame in accordance with a Time Compression Multiplexing-Integrated Service Digital Network (TCM-ISDN) Timing Reference (TTR) [0074];

Transmitting, by the central office DSL transceiver, first response signals containing odd numbered carriers in accordance with the alignment of the hyper frame to produce C-TONES-TTR [0081], wherein the first response signals include periodic phase reversal ([0077]-[0081]);

Acquiring, by the remote DSL transceiver, TTR synchronization in accordance with the C-TONES-TTR; upon acquiring TTR synchronization, transmitting, by the remote DSL transceiver, second signals containing even numbered carriers to produce • R-TONE-TTR [0082];

In response to the R-TONE-ITR, transmitting, by the central office DSL transceiver, second response signals containing odd numbered carriers to produce C-GALF1-TTR [0083];

In response to the C-GALF1-TTR, transmitting, by the remote DSL transceiver, third signals containing even numbered carriers to produce R-FLAG1-TTR [0083]; and in response to the R-FLAG1-TTR, transmitting, by the central office DSL transceiver, third response signals containing odd numbered carriers to produce C-FLAG1 [0083].

Long shows initializing and response to handshaking in NEXT and FEXT, but do not shows transmitting initializing and response to handshaking in odd and even carriers. Helm however discloses that all odd multiplied carriers be used in the downstream path from the central office and even multiplied carriers be used in the upstream path (or vise versa) and that this even-odd distribution of upstream and downstream frequencies offer advantages (col5 lines 51-66). It would have been obvious to one of ordinary skill

in the art at the time of the invention to modify the handshaking method of Long with the transmission on odd and even carrier of Helms in order to eliminate near end crosstalk. It should further be noted that the use of even numbered carriers for upstream and odd number carriers for downstream is simply a network parameter.

Regarding claim 3, Long discloses further comprises: subsequent to transmitting the first signals, transmitting, by the remote DSL transceiver, additional first signals from one signaling families to produce R-TONES-REQ [0081].

Regarding claims 5, Long discloses wherein the acquiring, by the remote DSL transceiver, TTR synchronization further comprises: continue transmitting, by the remote DSL transceiver, the R-ETONES-REQ until the TTR synchronization is acquired [0089].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN NGO whose telephone number is (571)272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nguyen Ngo

United States Patent & Trademark Office
Patent Examiner AU 2614
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/N. N./

Examiner, Art Unit 2416

/FIRMIN BACKER/

Supervisory Patent Examiner, Art Unit 2416